



# **Digital Concierge**

## **Call for Collaboration**

Public Document

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## ANNEXES:

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## 1. INTRODUCTION

1.1. The Infocomm Development Authority of Singapore (“**IDA**”) is issuing this Call for Collaboration (“**CFC**”) to invite Participants to submit proposals (“**Proposals**”) on the development and deployment of:

1.1.1. Common enabling content and functionalities reusable by different mobile services;

1.1.2. Transactional and innovative mobile services; and

1.1.3. Mobile Content Platform for development and hosting of business mobile websites.

1.2. Participants can be one of the following:

1.2.1. Information & Communication Technology (ICT) solution providers intending to develop and offer common reusable content and functionalities to other businesses; or

1.2.2. ICT solution providers intending to develop and host mobile websites for other businesses; or

1.2.3. Businesses targeting at consumers and intending to deploy and offer transactional and/or innovative mobile services to their customers.

### 1.3. Definition of Terms

The terms used in this CFC document are defined below and depicted in Figure 1:

- 1.3.1. **Mobile Enabler** refers to a common functionality developed by an ICT solution provider that serves to simplify both the technical and commercial interface(s) to back-end business application(s) of third-parties (e.g. payment system of the banks, booking system of the taxi companies). Once this common functionality is developed for various operating platforms, it reduces development time and can be reused by multiple mobile service providers based on commercial terms to be agreed between the parties.
  
- 1.3.2. **Mobile Service (or M-Service)** refers to service delivered to end-users via mobile browsers and/or software application installed on the mobile phones. Examples of M-Services include mobile search for businesses, location-based mobile map, mobile social networking and mobile commerce. Currently such M-Services are available on mobile browsers and/or operating platforms such as iPhone, Blackberry, Symbian, Windows Mobile and Android. M-Services may be developed using one or multiple Mobile Enablers, or none at all.

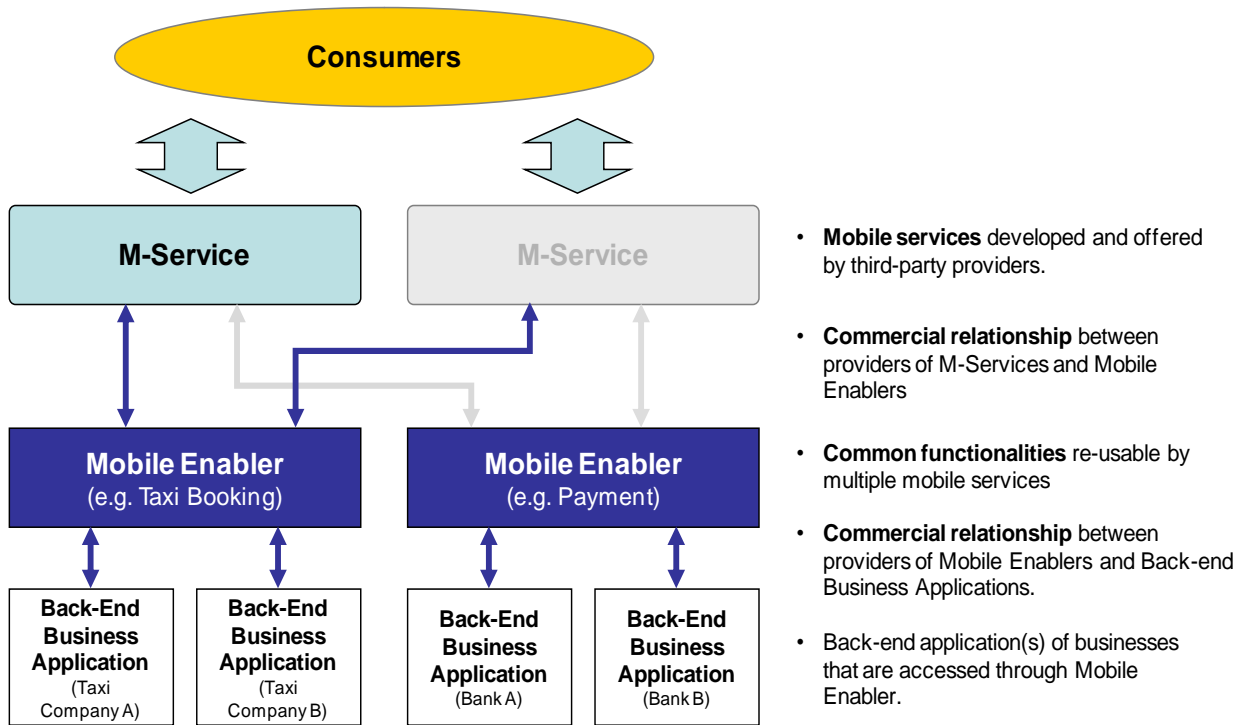


Figure 1: Definition of terms used in this CFC document

## **2. IMPORTANT NOTICES**

- 2.1. For the avoidance of doubt, this Public Document for the Digital Concierge CFC shall be read with and shall be subject to the Important Notices as set out in Annex A.

### 3. BACKGROUND

- 3.1. **Digital Concierge Pilot.** Digital Concierge is one of the key programmes in IDA's 10-year Intelligent Nation Masterplan ("iN2015"). A pilot for the Digital Concierge programme was successfully completed in April 2008. The pilot mobile service offered locals and tourists access to useful information and services on their mobile phone, such as searching for nearby restaurants. The pilot had successfully demonstrated users' receptivity to the mobile channel, and potential of the channel for businesses to market and deliver their services.
- 3.2. **Existing issues on mobile service development.** Adoption of mobile Internet services has been slow in Singapore (see Figure 2). Lessons gleaned from the pilot project and analysis of current market offerings helped identify the following issues:
- 3.2.1. Commonly-needed information related to businesses is neither comprehensive nor widely available on mobile. Few businesses in the Retail and F&B sectors have digitized content or content that is optimized for delivery through mobile phones. A common issue faced by mobile service developers is the lack of access to a cost effective and comprehensive business listing;
- 3.2.2. M-commerce or transactional services deployment lacks common enablers such as payment and ticket/coupon fulfillment that can alleviate the complexity and high cost of deploying m-commerce and transactional services on one or multiple mobile platforms;  
and

- 3.2.3. Limited availability of location positioning capability that works for most mobile phones, such as cell-id based location positioning, hinders the development of more location-based services for the users of non-GPS-enabled mobile phones.

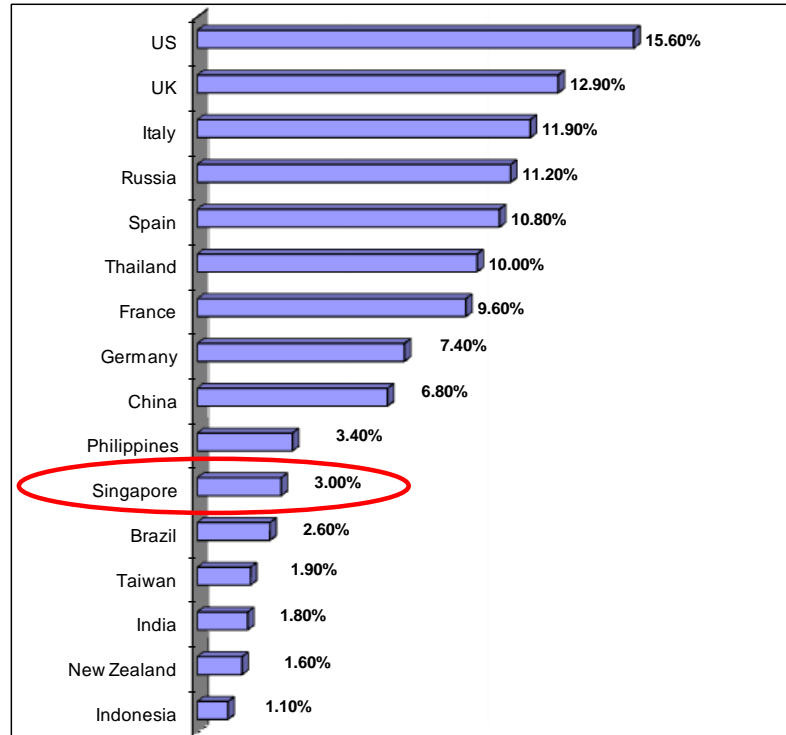


Figure 2: Mobile Internet Usage Penetration

(Source: Nielsen Mobile, Q1 2008)

- 3.3. **Need for common enabling functionalities for mobile service development.** From the mobile ecosystem value chain as depicted in Figure 3, it is envisaged that by allowing common content and functionalities such as Business Information and Mobile Commerce Infrastructure to be developed and shared with more players both upstream and downstream in adjacent value chain segments, significant advantages in the following areas can be realised:

- 3.3.1. Shortened time-to-market by reusing content and/or functionalities that are already developed;
- 3.3.2. Increased economies of scale achieved through sharing of common content and enabler functionalities, instead of largely platform-centric, vertically integrated value chain now; and
- 3.3.3. Reduced technical and commercial complexity of interfacing with multiple upstream players via aggregators that abstract multiple content sources or multiple complex functionalities.

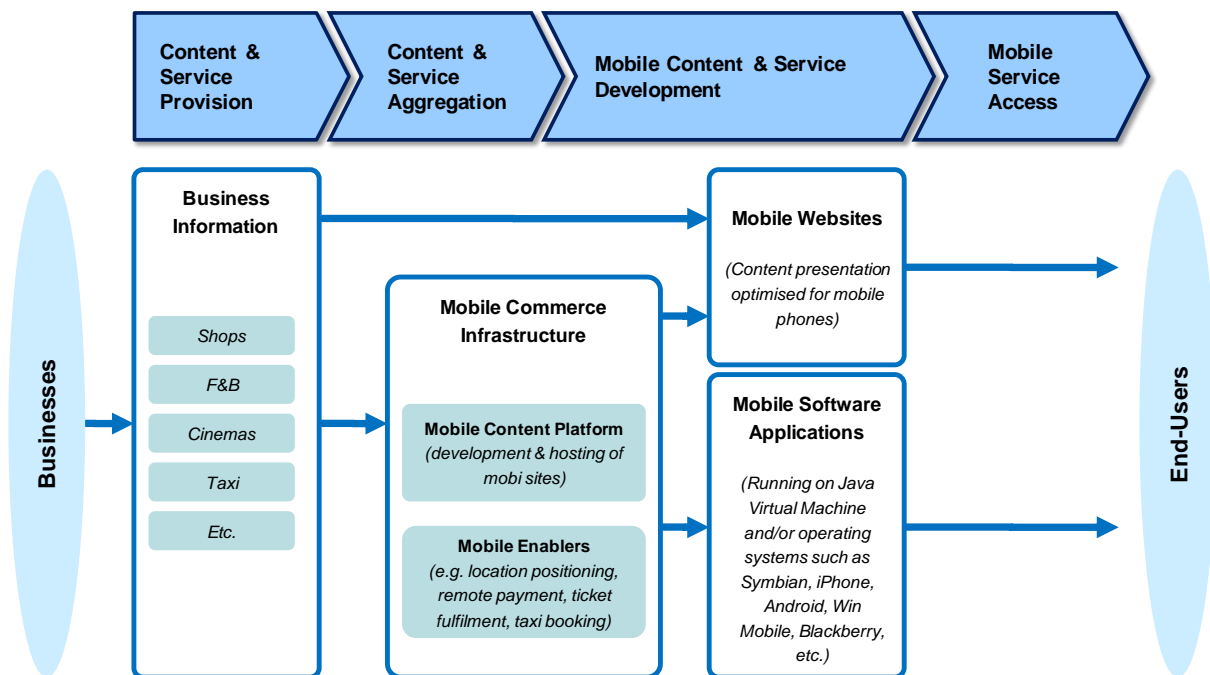


Figure 3: Mobile Services Ecosystem

- 3.4. **The Digital Concierge programme aims to catalyse the growth of the mobile services ecosystem** and address the above issues. The programme will:

- a. Encourage more pervasive use of the mobile channel by businesses, starting with those in the Retail and F&B sectors;
- b. Accelerate the development of informational, transactional, location-based and mobile-commerce services by the ICT solution providers through making available key Mobile Enablers; and
- c. Encourage greater consumer adoption and usage of mobile services through making available a wide variety of richer and more personalised mobile services.

### 3.5. **Benefits of the Programme**

- 3.5.1. **To Businesses** – Through the mobile channel, businesses will be able to reach out to their customers more effectively through targeted marketing and drive consumption of their goods and services.
- 3.5.2. **To ICT Solution Providers** – They will be able to leverage the common enabling content and functionalities to develop richer and wider variety of mobile services, and to build exportable capabilities.
- 3.5.3. **To Consumers** – They will be able to experience richer and more personalised mobile services. For example, they will be presented with timely information on shops and restaurants in the vicinity of their locations and according to their preferences, fulfilling shoppers' and diners' needs. Furthermore, they will be able to complete an entire transaction such as purchasing of movie tickets, making payment and receiving the electronic tickets all through their mobile phones.

## 4. OBJECTIVES

4.1. This CFC aims to:

- a. Facilitate the development and deployment of Mobile Enablers by the industry to catalyse the development of a wide variety of informational and transactional mobile services;
- b. Encourage the development and deployment of informational, transactional, mobile commerce, location-based and innovative M-Services that may leverage on the functionalities of the Mobile Enablers; and
- c. Encourage more pervasive use of the mobile channel by businesses, starting with those in the Retail and F&B sectors.

## 5. SCOPE & REQUIREMENTS

5.1. This CFC comprises the following areas and Participants may propose one or more projects that meet the requirements in any of these areas:

- 5.1.1. Shared Business Directory Service;
- 5.1.2. Mobile Sites and Mobile Content Platform;
- 5.1.3. Mobile Enablers with Transactional M-Services;
- 5.1.4. Innovative M-Services.

### 5.2. Shared Business Directory Service

5.2.1. Business related information forms a critical part of mobile services, particularly in the areas of search and content portal. Today, most of these mobile services gather business directory and related information in their own ways and enhance them to meet their individual service needs. However, such business related information is usually tightly kept within individual services where the full potential of the information is under-exploited. As a result, business information is not made widely available to third-parties via competitive commercial offerings. In addition, business information that is commonly needed by consumers, such as service/product brand (instead of business name) and detailed business description, are also generally unavailable to third-party service developers.

5.2.2. For the Retail and F&B sectors in particular, only few businesses have mobile presence and provide information that is optimized for use on mobile phones.

- 5.2.3. The availability of a shared directory that contains a comprehensive listing of businesses with a standardised set of business information will help to stimulate the development of a wide variety of mobile services, and thus fulfilling consumers' need for such information anywhere and anytime.
- 5.2.4. The objective of this part of the CFC is to develop a set of broad and rich business information for the Retail and F&B businesses that is easily accessible to and competitively priced for third-party mobile service providers.
- 5.2.5. Participants are invited to submit proposals on the development of a Shared Business Directory Service listing businesses in the Retail and F&B sectors in Singapore through a standardised and comprehensive set of information fields with a view of offering this business directory information to third-party mobile service providers.
- 5.2.6. **The detailed requirements for Shared Business Directory Service are specified in Annex B.**
- 5.3. **Mobile Sites and Mobile Content Platform**
- 5.3.1. Business mobile websites enable a deeper level of interaction with consumers, complementing the Shared Business Directory Service which provides a comprehensive listing of businesses. These business mobile websites enable a stronger engagement of the consumers with additional benefits such as:
- 5.3.1.1. Reinforcing consumer brand awareness;

- 5.3.1.2. Satisfying immediate consumer needs for more understanding of the businesses' products and services (e.g. through detailed description, vivid imagery); and
  - 5.3.1.3. Providing immediate on-the-go interaction (e.g. through a reservation page) and useful info (e.g. latest promotions).
- 5.3.2. The objective of this part of the CFC is to encourage businesses, starting with those in the Retail and F&B sectors, to quickly and easily establish their mobile presence by facilitating:
- 5.3.2.1. Development and deployment of Mobile Content Platform that simplifies the development, deployment and maintenance of Mobile Sites; and
  - 5.3.2.2. Cost-effective development, maintenance and hosting of business mobile websites.
- 5.3.3. Participants are invited to submit Proposals to provide Mobile Content Platform, Mobile Site development, maintenance and hosting services for businesses in the Retail and F&B sector for a start.
- 5.3.4. **The detailed requirements for Mobile Sites and Mobile Content Platform are specified in Annex C.**

#### 5.4. **Mobile Enabler with Transactional M-Services**

- 5.4.1. Many mobile service providers today are faced with the challenge of complexity and high cost involved in deploying transactional mobile services due to the lack of widely available common enabling functionalities such as mobile booking/ticketing.
- 5.4.2. Mobile Enablers serve to provide a set of technical and commercial functions, such as application programming interfaces, technical and commercial liaison, to third-party mobile service providers for abstracting the underlying complexity of certain commonly needed functionalities such as mobile booking/ticketing.
- 5.4.3. These Mobile Enablers will also provide the necessary technical resources and support to enable third-party service providers to operate in a variety of popular but heterogeneous mobile development platforms such as Symbian, Windows Mobile, Apple iPhone, Google Android and RIM Blackberry.
- 5.4.4. The availability of such Mobile Enablers that are reusable by third-parties will help to facilitate the development of mobile services by abstracting complexity, reducing costly duplication and reusing existing functionalities, thus achieving shorter time-to-market and greater economies of scale.
- 5.4.5. The objective of this part of the CFC is to encourage the development of Mobile Enablers that provide common enabling functionalities reusable by third-party mobile services.

5.4.6. Participants are invited to submit Proposals to develop and provide Mobile Enablers in, but not limited to, one or more of the following areas:

- 5.4.6.1. Mobile Location Positioning;
- 5.4.6.2. Mobile Remote Payment;
- 5.4.6.3. Mobile Ticketing & Fulfillment; and
- 5.4.6.4. Mobile Taxi Booking.

5.4.7. **The detailed requirements for Mobile Enablers with Transactional M-Services are specified in Annex D**

5.4.8. In addition to the above Mobile Enablers, the **Participants are also invited to propose other enabling functionalities** that will be beneficial to the mobile services eco-system in Singapore.

5.4.9. In general, all proposals for Mobile Enablers shall demonstrate the following:

- 5.4.9.1. Provision of key functionalities that are needed by many third-party M-Services across different heterogeneous mobile platforms;
- 5.4.9.2. Reusability of these key functionalities by multiple different third-party M-Services; and
- 5.4.9.3. Abstraction of both technical as well as commercial complexity from the M-Services.

## 5.5. Innovative M-Services

- 5.5.1. The mobile channel creates new opportunities for businesses to reach out to their customers more effectively through targeted marketing, and delivers new experiences to their consumers through innovative mobile services. For example, the mobile channel can help businesses improve their understanding of customers' preferences and thus able to provide more personalised content and services to their customers. The customers in turn receive content and services that are tailored to their personal interest and preference.
- 5.5.2. The objective of this part of the CFC is to encourage the development and deployment of innovative M-Services that seek to create new opportunities for businesses and deliver new compelling experiences to the consumers.
- 5.5.3. Participants are invited to submit Proposals to develop and deploy innovative M-Services that creatively leverage the mobile channel to market, engage and deliver services.
- 5.5.4. **The detailed requirements for Innovative M-Services are specified in Annex E.**

## **6. OTHER REQUIREMENTS**

### **6.1. Consortium Composition**

- 6.1.1. Companies are encouraged to form consortium with relevant business partners with the necessary expertise, experience and domain knowledge to participate in this CFC.
- 6.1.2. Each consortium shall clearly identify a consortium lead for the purpose of managing and coordinating the activities of the consortium. The consortium leader shall be responsible for submitting a Proposal on behalf of all its partners.
- 6.1.3. IDA reserves the right to disqualify or reject any Proposal in the event of a withdrawal of any consortium member, or where any material representation within the Proposal is discovered to be inaccurate, misleading or false.

### **6.2. Pre-requisites for Participant(s)**

- 6.2.1. The minimum pre-requisites for Participants in this CFC are as follows:
  - 6.2.1.1. For individual company, the company shall be registered in Singapore with the Accounting & Corporate Regulatory Authority (ACRA);
  - 6.2.1.2. For the consortium, at least the Consortium Leader shall be registered in Singapore with the Accounting & Corporate Regulatory Authority (ACRA);

- 6.2.1.3. The proposed service(s) must be developed in Singapore wholly or in part.

## **7. PROJECT FUNDING**

- 7.1. The funding for selected Proposal(s) will be determined upon assessment of the impact and scope of the project. All terms and conditions of any such approved funding shall be agreed between selected Participants and IDA.
  
- 7.2. Any funding support will be performance based to encourage the completion of the development of the proposed services as well as the achievement of committed targets.

## 8. SCHEDULE

### 8.1. Timeline of Events

Date	Event
<b>26 Jun 2009</b>	Public Announcement of CFC Release of CFC Documents Registration Opens for CFC Public Briefing
<b>3 Jul 2009</b> (2.00pm)	Registration Closes for CFC Public Briefing
<b>6 Jul 2009</b> (2.00pm – 5.30pm)	CFC Public Briefing
<b>31 Aug 2009</b> (5.00pm)	Deadline for CFC Proposal Submission
<b>15 – 30 Sep 2009*</b>	Presentation of Proposal by Short-Listed Participants
<b>Oct/Nov 2009*</b>	Announcement of Selected Proposals and Award of Grants

\* *Tentative only, the exact dates are to be determined.*

### 8.2. Public Briefing

8.2.1. All interested companies are invited to attend the CFC Public Briefing. This briefing will be conducted by IDA and will cover the details of the CFC, including the events leading to the final award of the grants, and expectations of the Proposals.

8.2.2. All parties interested to attend the public briefing are to register by email to **ida\_dc@ida.gov.sg** no later than **2.00pm on 3 Jul 2009**.

8.2.3. Due to limited seating capacity at the CFC Public Briefing venue, each company is limited to register up to 2 representatives to attend the briefing.

8.2.4. In the registration email, please include the following information:

<b>Subject:</b>	<b>Digital Concierge CFC Public Briefing</b>
<b>Body:</b>	
Company Name:	
Brief Description of Business in less than 100 words:	
<b>Attendees:</b>	
Name:	
Designation:	
Department:	
Telephone Number:	
Email Address:	

8.2.5. Details of the CFC Public Briefing will be made known to registered parties via email.

## **9. SELECTION PROCESS**

### **9.1. Selection of Proposal(s) for Consideration for Award of Grant**

9.1.1. Only complete Proposals that comply with the specifications, requirements and conditions as set out in this Public Document for Digital Concierge CFC will be evaluated by IDA for consideration for the award of a grant.

9.1.2. Short-listed Participants may be required to make presentation(s) of their Proposal(s) (at their own cost and expense) and answer questions on the project in response to IDA. Without prejudice to paragraph 9.3, IDA reserves the right to reject any or all Proposals submitted pursuant to this Public Document for Digital Concierge Call for Collaboration. Where a Proposal is selected by IDA for consideration for the award of a grant, the relevant Participant will be notified by IDA. The terms of the project, project milestones, and co-funding terms will be separately negotiated and agreed to between the parties.

9.1.3. For the avoidance of doubt, the selection of any Proposal by IDA may not necessarily lead to the award of a grant.

### **9.2. Selection Criteria**

9.2.1. Selection of the proposal for the award of grant will be based on the following criteria:

- 9.2.1.1. **Consumer reach and usage**, including the number of consumers using the respective services and their usage volume.
- 9.2.1.2. **Business adoption**, including the number of businesses adopting the mobile channel.
- 9.2.1.3. **Sustainability of the business model**, including the revenue model and service pricing; and
- 9.2.1.4. **Effectiveness of the proposed plans to promote consumer and business adoption**, including the ability of the plans to ensure sustained usage.

### 9.3. Disclaimer

- 9.3.1. IDA shall have the absolute discretion to accept or reject any Proposal submitted to IDA without being liable to give any reason hereof. IDA reserves the right to retain the Proposals submitted by all parties without liability for the costs of such documents.

## 10. SUBMISSIONS

### 10.1. Format of Submissions

10.1.1. Submissions should be made using the Proposal template that can be downloaded from IDA's website [www.ida.gov.sg](http://www.ida.gov.sg).

10.1.2. All submissions should include the following information:

- (i) **Business Plan for the first three (3) years**, covering the business model, deployment and pricing strategy, plans to promote adoption, projected users, usage volumes and estimated revenue; and
- (ii) **Project Implementation Plan**, covering the implementation milestones required by this CFC; and
- (iii) **Technical Solution**, covering the system architecture and solution that meet the requirements specified in this CFC; and
- (iv) **Project Cost and Justifications**, including the cost to develop and deploy the required service(s), justifications and expected funding if any.

10.1.3. All assumptions used shall be stated clearly in the Proposal.

## 10.2. Place and Time of Submission

10.2.1. One (1) hardcopy and one (1) softcopy (in a CD-ROM) of the Proposal should reach IDA no later than **5.00pm on 31 August 2009**. All Proposals must be clearly marked as “Digital Concierge CFC”, and addressed to:

Infocomm Development Authority of Singapore  
8 Temasek Boulevard #14-00  
Suntec Tower Three  
Singapore 038988

10.2.2. Proposals may also be submitted in person at the IDA reception desk on the 14th floor of Suntec Tower 3.

10.3. **IDA reserves the right not to accept late submissions.**

## 10.4. Contact Details

10.4.1. Enquiries regarding this CFC should be addressed to:

Catherine Chua (Ms)  
IDA  
DID: (65) 6211-0389  
Fax: (65) 6211-2205  
Email: [ida\\_dc@ida.gov.sg](mailto:ida_dc@ida.gov.sg)